AMENDMENTS TO THE CLAIMS:

Claims 1-23 (cancelled)

24 (original): An isolated antibody, or antibody fragment, which specifically binds to a polypeptide selected from the group consisting of:

(a) a polypeptide, or a biologically or immunologically active fragment thereof, comprising the amino acid sequence as set forth in Figure 2 (SEQ ID NO: 2);

(b) a polypeptide comprising amino acid 21 to amino acid 331 as set forth in Figure 2 (SEQ ID NO: 2);

(c) a polypeptide comprising amino acid 27 to amino acid 331 as set forth in Figure 2 (SEQ ID NO: 2);

(d) a polypeptide comprising amino acid 28 to amino acid 46 as set forth in Figure 2 (SEQ ID NO: 2);

(e) a polypeptide comprising amino acid 77 to amino acid 91 as set forth in Figure 2 (SEQ ID NO: 2);

(f) a polypeptide comprising amino acid 188 to amino acid 210 as set forth in Figure 2 (SEQ ID NO: 2);

(g) a polypeptide comprising amino acid 263 to amino acid 274 as set forth in Figure 2 (SEQ ID NO: 2); and

(h) a polypeptide which is at least 70% identical to the polypeptide of (a), (b), (c), (d), (e), (f), or (g).

25 (original): The antibody of Claim 24, wherein the antibody specifically binds to the amino acid sequence PLGGESICSAGAPAKYSIT (SEQ ID NO: 8).

26 (original): The antibody of Claim 24, wherein the antibody specifically binds to the amino acid sequence HSSDYSMWRKNQYVS (SEQ ID NO: 10).

27 (original): The antibody of Claim 24, wherein the antibody specifically binds to the amino acid sequence DAGTDSGFTFSSPNFATIPQDTV (SEQ ID NO: 11).

28 (original): The antibody of Claim 24, wherein the antibody specifically binds to the amino acid sequence NEIVDSASVPET (SEQ ID NO: 12).

29 (currently amended): The antibody of Claim 24, wherein the antibody is **selected from the group consisting of** a polyclonal antibody, **a monoclonal antibody, a chimeric antibody, a humanized antibody and a fully-human antibody.**

Claim 30 (cancelled)

31 (original): An immunoconjugate comprising an isolated antibody, or antibody fragment, which specifically binds to a polypeptide selected from the group consisting of:

(a) a polypeptide, or a biologically or immunologically active fragment thereof, comprising the amino acid sequence as set forth in Figure 2 (SEQ ID NO: 2);

(b) a polypeptide comprising amino acid 21 to amino acid 331 as set forth in Figure 2 (SEQ ID NO: 2);

(c) a polypeptide comprising amino acid 27 to amino acid 331 as set forth in Figure 2 (SEQ ID NO: 2);

(d) a polypeptide comprising amino acid 28 to amino acid 46 as set forth in Figure 2 (SEQ ID NO: 2);

(e) a polypeptide comprising amino acid 77 to amino acid 91 as set forth in Figure 2 (SEQ ID NO: 2);

(f) a polypeptide comprising amino acid 188 to amino acid 210 as set forth in Figure 2 (SEQ ID NO: 2);

(g) a polypeptide comprising amino acid 263 to amino acid 274 as set forth in Figure 2 (SEQ ID NO: 2); and

(h) a polypeptide which is at least 70% identical to the polypeptide of (a), (b), (c), (d), (e), (f), or (g).

conjugated to a therapeutic agent.

32 (original): The immunoconjugate of Claim 31, wherein the therapeutic agent is a cytotoxic agent.

33 (original): The immunoconjugate of Claim 32, wherein the cytotoxic agent is selected

from the group consisting of ricin, doxorubicin, daunorubicin, taxol, ethidium bromide, mitomycin, etoposide, tenoposide, vincristine, vinblastine, colchicine, dihydroxy anthracin dione, actinomycin D, diphtheria toxin, *Pseudomonas* exotoxin (PE) A, PE40, ricin, abrin, glucocorticoid and radioisotopes.

34 (original): The immunoconjugate of Claim 31, wherein the antibody fragments are selected from the group consisting of Fv, F(ab') and $F(ab')_2$ fragments.

35 (original): A method for selectively destroying a cell expressing the polypeptide of Figure 2 (SEQ ID NO: 2) comprising reacting the immunoconjugate of Claim 31 with the cell so that the therapeutic agent of the immunoconjugate can destroy the cell.

36 (original): A method of treating a disease-state in a human patient which disease-state is associated with expression of RG1 and wherein the method comprises administering to the patient a therapeutically effective amount of the immunoconjugate of Claim 31.

37 (original): A method of treating a disease-state in a human patient which disease-state is associated with inappropriate expression of RG1 and wherein the patient is in need of decreased levels of a polypeptide comprising a member selected from the group consisting of:

(a) a polypeptide, or a biologically or immunologically active fragment thereof, comprising the amino acid sequence as set forth in Figure 2 (SEQ ID NO: 2); and

(b) a polypeptide which is at least 70% identical to the polypeptide of (a) and wherein the method comprises administering to the patient a therapeutically effective amount of a ribozyme which specifically cleaves RNA encoding the polypeptide.

38 (original): A method of treating a disease-state in a human patient which disease-state is associated with inappropriate expression of RG1 and wherein the patient is in need of decreased levels of a polypeptide having the amino acid sequence as set forth in Figure 2 (SEQ ID NO: 2), wherein the method comprises administering to the patient a therapeutically effective amount of a polynucleotide which is complementary to a polynucleotide encoding the polypeptide or a portion thereof.

39 (original): A diagnostic method wherein the method comprises analyzing a sample derived from a host for the presence of a polypeptide selected from the group consisting of:

(a) a polypeptide, or a biologically or immunologically active fragment thereof, comprising the amino acid sequence as set forth in Figure 2 (SEQ ID NO: 2);

(b) a polypeptide comprising amino acid 21 to amino acid 331 as set forth in Figure 2 (SEQ ID NO: 2);

(c) a polypeptide comprising amino acid 27 to amino acid 331 as set forth in Figure 2 (SEQ ID NO: 2);

(d) a polypeptide comprising amino acid 28 to amino acid 46 as set forth in Figure 2 (SEQ ID NO: 2);

(e) a polypeptide comprising amino acid 77 to amino acid 91 as set forth in Figure 2 (SEQ ID NO: 2);

(f) a polypeptide comprising amino acid 188 to amino acid 210 as set forth in Figure 2 (SEQ ID NO: 2);

(g) a polypeptide comprising amino acid 263 to amino acid 274 as set forth in Figure 2 (SEQ ID NO: 2); and

(h) (e) a polypeptide which is at least 70% identical to the polypeptide of (a), (b), (c), (d), (e), (f), or (g).

40 (original): The method of Claim 39, wherein analyzing comprises contacting the sample with the antibody or antibody fragment of Claim 24, which specifically binds to the polypeptide and detecting binding of the antibody to the polypeptide in the sample.

41 (currently amended): A diagnostic method wherein the method comprises analyzing for the presence of a polynucleotide comprising a polynucleotide which is at least 70% identical to a member selected from the group consisting of:

(a) a polynucleotide encoding a polypeptide, or a biologically or immunologically active fragment thereof, comprising the amino acid sequence set forth in Figure 2 (SEQ ID NO: 2); and

(b) **a** polynucleotide which is complementary to the polynucleotide of (a).

Claims 42-43 (cancelled)

44. (new) The antibody of Claim 24, wherein the antibody is a full-human antibody.

45 (new): A vaccine comprising an amount of a polypeptide, or a biologically or immunologically active fragment thereof, comprising the amino acid sequence as set forth in Figure 2 (SEQ ID NO: 2), dispersed in a physiologically acceptable, nontoxic vehicle, which amount is effective to induce an immune response in a human against prostate cancer associated with RG1 expression.

46 (new): A vaccine comprising a DNA sequence encoding a polypeptide, or a biologically or immunologically active fragment thereof, comprising the amino acid sequence as set forth in Figure 2 (SEQ ID NO: 2), wherein said DNA is operably linked to a promoter, and where, following administration in vivo into a tissue of a mammal, sufficient uptake of said DNA into cells occurs, and sufficient expression of the polypeptide or fragment occurs, so as to produce an immunogenic amount of said polypeptide or fragment, which amount is effective to immunize a human against prostate cancer associated with RG1 expression.